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PRELIMINARY
WILDERNESS
RECOMMENDATIONS
-JUNE 1983

DRAFT

North Central California Wilderness Study Areas

ENVIRONMENTAL IMPACT STATEMENT

United States
Department of the Interior
ureau of Land Management
edding, California

QH
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N373
1983

March 3, 1849

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Ukiah District Office
Redding Resource Area
355 Hemsted Drive
Redding, California

IN REPLY
REFER TO:

(CA-059)
1792/8500

June 1983

Enclosed for your review and comment is the draft environmental impact statement (EIS) prepared to analyze the effects of management alternatives for the Timbered Crater Wilderness Study Area (WSA) and the Lava WSA in the Alturas Resource Area of the Susanville District, California.

This statement was prepared pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969. It is based on information from Bureau of Land Management inventories and planning documents and other sources, including Federal, State, and local agencies and interested private organizations and citizens.

Comments on this draft environmental statement should be received by this office no later than September 1, 1983, in order to be considered in the final EIS. Your comments should be returned to:

Area Manager
Redding Resource Area
Bureau of Land Management
355 Hemsted Drive
Redding, California 96002

Sincerely yours,

Van W. Manning

Van W. Manning
District Manager

NOTICE TO READERS

Please keep this draft EIS for possible use as part of the final EIS. Council on Environmental Quality regulations (43 CFR 1503.4(c)) provide for circulation of abbreviated final EISs where major changes to the draft are not required. If the public review requires only minor changes to the draft, the final EIS will consist of this draft and a supplement containing public comments, responses to comments, and necessary changes and corrections. This procedure will cut printing costs and accelerate the environmental process.

ID 88013135

BLM CA ES 83-011-8500
DEIS INT 83-20

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1983

DEPARTMENT OF THE INTERIOR

DRAFT ENVIRONMENTAL IMPACT STATEMENT

PRELIMINARY WILDERNESS RECOMMENDATIONS FOR THE TIMBERED CRATER AND LAVA WILDERNESS STUDY AREAS

Prepared by
BUREAU OF LAND MANAGEMENT
UKIAH DISTRICT OFFICE, CALIFORNIA

State Director

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225

ENVIRONMENTAL IMPACT STATEMENT
PRELIMINARY WILDERNESS RECOMMENDATIONS
TIMBERED CRATER WSA AND LAVA WSA

Draft (X) Final ( ) Environmental Impact Statement

1. Type of Action: Administrative ( ) Legislative (X)

2. Abstract:

The Bureau of Land Management, Redding Resource Area, Ukiah District, California, analyzes the effects of a wilderness designation and alternatives on the Timbered Crater Wilderness Study Area (WSA) and the Lava WSA. The alternatives to wilderness designation include partial wilderness, multiple-use, and limited development. Wilderness characteristics and special features are examined. Preliminary recommendations are to designate both WSAs as nonsuitable for wilderness.

3. Location of Action: Lassen, Modoc, Shasta, and Siskiyou counties.

4. For further information contact:

Area Manager
Bureau of Land Management
355 Hemsted Drive
Redding, California 96002
(916) 246-5325

5. Comments must be received by:

September 1, 1983

Summary

SUMMARY

The Bureau of Land Management (BLM), through the Secretary of the Interior, is under Congressional mandate to review roadless public land areas of 5,000 acres or more with wilderness characteristics and to make recommendations, by 1991, to the President on the suitability of such areas for preservation as wilderness. This environmental impact statement (EIS) assesses the environmental consequences of managing the Timbered Crater and Lava WSAs as wilderness and analyzes alternatives to wilderness. The study areas include portions of Shasta, Lassen, Siskiyou, and Modoc counties and are located within the Alturas Resource Area in BLM's Susanville District.

To help "scope" and summarize significant issues related to wilderness designation, BLM requested public comments on its wilderness inventory and planning process. Scoping and public involvement have not identified any significant issues or environmental consequences in the two WSAs.

Alternatives considered for the Timbered Crater WSA are: all wilderness, partial wilderness, multiple-use, and limited development/no action, which is also the proposed action.

Two alternatives are considered for the Lava WSA: all wilderness and multiple-use/no action, which is also the proposed action. Partial wilderness was considered for Lava WSA but was dropped from detailed analysis because there are no significant resource conflicts to resolve and no practical boundary adjustments.

The environmental effects of implementing each of the alternatives were analyzed by an interdisciplinary team during the planning process. Based on the best information available, it was determined that there would be no significant effects from implementing any of the alternatives. Wilderness designation would guarantee the continued preservation and enhancement of wilderness values, while nonwilderness alternatives would not. However, based on past and predicted future resource demands and use, it was concluded that wilderness values would not be significantly impaired under any of the nonwilderness alternatives.

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Introduction

1

CHAPTER 1

INTRODUCTION

LOCATION

The Ukiah District, Bureau of Land Management, is analyzing two wilderness study areas (WSAs) for the Alturas Resource Area, California. Both WSAs are within approximately 250 miles of the San Francisco Bay and Sacramento metropolitan areas (Map 1-1). The Timbered Crater WSA (CA-030-201) is in Shasta, Modoc, and Siskiyou counties and contains 18,690 acres of public land. The Lava WSA (CA-030-203) is in Shasta and Lassen counties and contains 11,632 acres of public land.

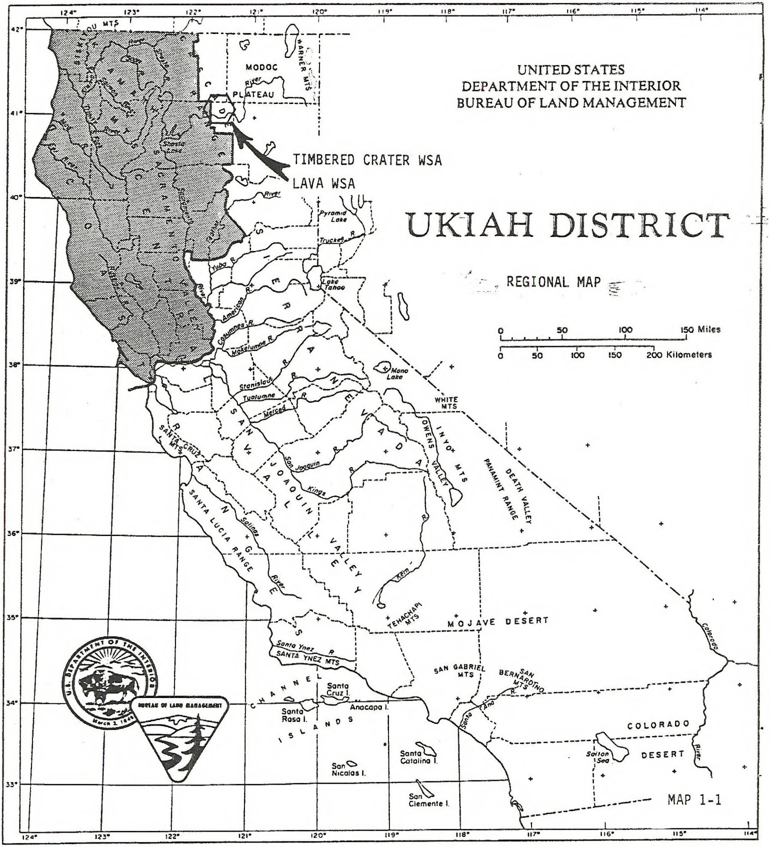
The BLM reorganized administrative boundaries in northern California in July 1982. The two WSAs were administrately transferred from the Redding Resource Area (now the Ukiah District) to the Alturas Resource Area (Susanville District). Since the Redding Resource Area previously administered the subject lands and had recently completed a planning update, it is preparing this EIS in close coordination with the Susanville District. The management recommendation will be made by the Susanville District Manager.

PURPOSE OF AND NEED FOR ACTION

The purpose of this action is to determine whether the Timbered Crater and Lava WSAs, or portions of the WSAs, should be designated as suitable for inclusion in the National Wilderness Preservation System. This evolves from a requirement by Congress in the Wilderness Act of 1964 to inventory all roadless areas under public ownership possessing wilderness qualities. Also, Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) directs the Secretary of Interior to review roadless areas of 5,000 acres or more with wilderness characteristics, and, by 1991, make recommendations to the President on the suitability of such areas for preservation as wilderness. Within two years after receiving a recommendation, the President must send a report to Congress. Congress, however, has no deadline for acting on the President's recommendation.

THE WILDERNESS INVENTORY

The BLM identified wilderness study areas in the Alturas Resource Area during California's statewide wilderness inventory. The inventory process and general descriptions of the WSAs are contained in Wilderness: Final Intensive Inventory, Public Lands Administered by BLM California Outside the California Desert Conservation Area (USDI, BLM, 1979).



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

UKIAH DISTRICT

REGIONAL MAP

TIMBERED CRATER WSA

LAVA WSA

MAP 1-1

BLM LAND-USE PLANNING

The second step in the study process was to integrate wilderness evaluation into the BLM planning system. In this case, the planning revision generally followed the 1979 Resource Management Plan Regulations (43 CFR 1600). Since this was a "transition planning effort" (started prior to the 1979 regulations), an EIS was not required on the entire plan. In most cases, site-specific environmental reports will be developed when specific decisions are implemented. In the case of wilderness, study areas were brought through the planning process to the point where alternatives were developed.

There were no significant issues identified within either of the WSAs during the planning process. There were some concerns expressed by the public on how certain resources would be managed under wilderness designation and on the potential effects on geothermal exploration and development in the Timbered Crater WSA. The implications to livestock management, mineral materials disposal (lightweight cinders), and future high voltage transmission line corridors were concerns expressed about the Lava WSA.

Potential resource conflicts were analyzed and alternatives developed by an interdisciplinary team during the land-use planning effort.

In addition to public involvement throughout the planning process and an initial screening of proposed wilderness alternatives at public meetings, public input was requested prior to initiating this EIS through an announcement in the Federal Register. No relevant comments were received and no issues were identified.

Following public review of the draft environmental impact statement, the Ukiah District, with State Director's concurrence, will prepare a preliminary final environmental impact statement and wilderness study report. These will be reviewed by the BLM Director and the Secretary of the Interior, who will file the final EIS and make a recommendation to the President, who will make a final recommendation to Congress. Until Congress decides whether or not to designate an area as wilderness, the WSAs will be managed in accordance with the Bureau's Interim Management Policy and Guidelines for Lands Under Wilderness Review (USDI, BLM, 1979). Detailed procedures for wilderness study and reporting can be found in the BLM's Wilderness Study Policy: Policies, Criteria, and Guidelines for Conducting Wilderness Studies on Public Lands (Volume 47, Federal Register, pp. 5098-5722).

Alternatives

2

CHAPTER 2

ALTERNATIVES INCLUDING THE PROPOSED ACTION

INTRODUCTION

Chapter 2 describes the alternatives selected for analysis in this study. The description of the alternatives allows the reader to compare them, weigh the merits of each, and draw a conclusion as to the management changes each might bring to the various resources.

Certain standard management practices directed by regulation and policy would be applicable to all alternative management programs. Protection of soils, watershed, visual resources, air quality, and other resources is required by the Federal Land Policy and Management Act of 1976. Specific guidance for these measures are embodied in numerous policy statements and regulations. In addition, compliance with specific legislation, such as the Endangered Species Act and the National Historic Preservation Act, is required.

add wildlife

Until either released or designated by Congress, both WSAs will be managed under the Interim Management Policy and Guidelines for Lands Under Wilderness Review. These guidelines will guide BLM staff in decisions that arise in everyday management of lands under wilderness review. Certain uses that occurred on the lands before the passage of the Federal Land Policy and Management Act of 1976 will be allowed within an area. These uses are mining, grazing, and mineral leasing.

BLM will manage newly designated wilderness areas under the provisions of the Wilderness Act, FLPMA, and BLM's Wilderness Management Policy. The Wilderness Management Policy can be amended to include requirements of the law designating the wilderness area. Section 4 of the Wilderness Act states that wilderness areas should be devoted to recreation, scenic, scientific, educational, conservation, and historical use. (The general implications of wilderness designation are given in Table 2-1).

ALTERNATIVE FORMULATION

During the land-use planning process five alternatives were developed. The alternatives included all wilderness, partial wilderness, and several non-wilderness alternatives, as well as the no action alternative. As the EIS preparation progressed and alternatives and effects were analyzed, it became apparent that there was a close similarity between alternatives and the resulting consequences to the resources. In addition, lack of public concern or support for any particular alternative indicated that the original array of alternatives was not necessary. Therefore, it was decided a lesser array of alternatives would adequately define the issues and provide a clear basis for choice by the decisionmakers and the public.

Table 2-1

General Implications of Wilderness Designation

Minerals Management	Allows mineral entry and development in wilderness areas until midnight, December 31, 1983. After December 31, 1983, only holders of valid existing rights will be allowed to continue operations. All title to reserved land surface is to the United States. Except as expressly provided in the Wilderness Act, no surface use will be allowed unless reasonably required for mining or prospecting.
Access/Developments	Right of access to mining claims, State-owned land, and privately owned land is preserved, and roads can be maintained. Motorized vehicles and equipment, landing of aircraft, roads, structures, installations, and commercial enterprises are generally prohibited.
Land Exchange	Public land outside designated wilderness can be exchanged for inholdings. However, wilderness-designated lands cannot be exchanged; they can be transferred to another Federal agency if they continue to be managed as wilderness.
Grazing	Grazing that existed prior to designation may continue. Certain uses, such as use of motorized vehicles to support grazing, are permissible (House Report 96-617). No new grazing uses are permitted after wilderness designation without Congressional approval. However, allotment management plans may be developed for existing grazing leases.
Wildlife & Vegetation wh	Exotic plants + animals species cannot be introduced; native species may be planted. Most vegetation eradication measures are prohibited unless case-by-case assessment indicates minor impacts on wilderness values.
Wilderness Management Plans	A wilderness management plan will be developed and will specify visitor-management methods needed to mitigate human impacts on wilderness values. The plan will specify systems to monitor use and to detect adverse impacts.
Emergency Situations	Wilderness qualities may be adversely affected in situations involving human health and safety. Law enforcement agencies may use motor vehicles in emergencies; normal patrol would be barred, however.

Wildfires and Insect Epidemics	Tools and methods will be selected that will cause minimum degradation. Pre and post-suppression methods are permitted, but should benefit wilderness.
Water Development Structures	New installations are subject to Presidential approval.
Recreation	Only minimum facilities necessary for protection of resources and health and safety will be allowed.

TIMBERED CRATER WSA

For the Timbered Crater WSA, the limited development alternative was combined with the no action alternative because of their similarity. Prior to designation as a WSA, the area was managed to accommodate a limited amount of resource development consistent with maintenance of a predominately natural environment.

LAVA WSA

Only two alternatives were determined necessary for the Lava WSA. A partial wilderness alternative was not analyzed in detail because none of the potential manageability problems are significant enough to warrant a boundary change. The no action alternative was combined with both the limited and intensive development alternatives because of their similarity and the fact that geographic constraints and lack of significant resources in the area would naturally limit development. See the Timbered Crater alternatives below for a general understanding of the various alternatives that were dropped from Lava.

TIMBERED CRATER WILDERNESS STUDY AREA

ALTERNATIVE 1 - ALL WILDERNESS

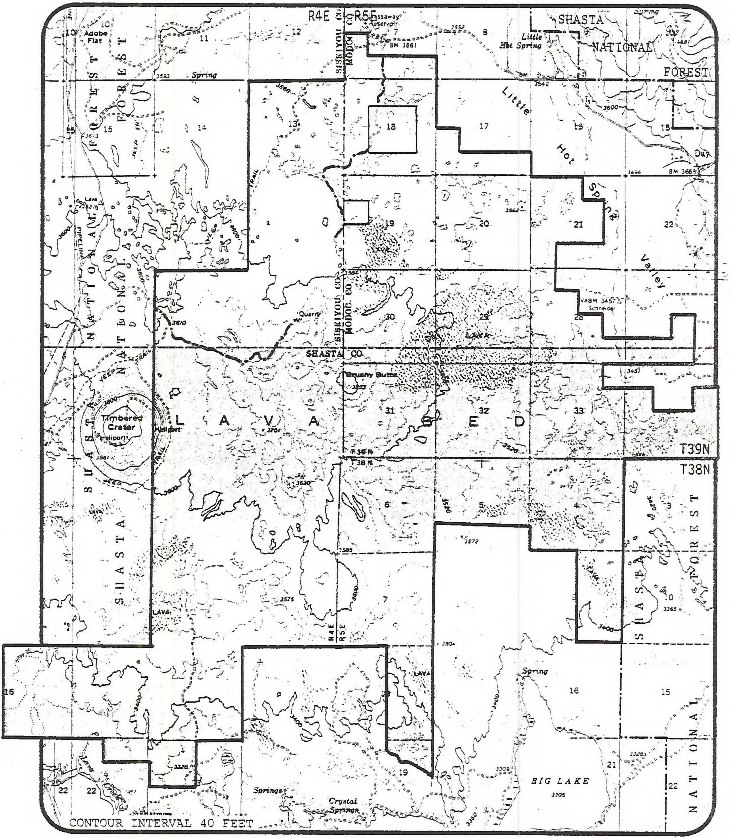
All lands within the 18,690-acre Timbered Crater WSA would be designated as wilderness to provide legislative preservation of the wilderness characteristics (Map 2-1). Discretionary management actions would be consistent with preserving the wilderness values. The area would be managed according to the Wilderness Management Policy (USDI, BLM, 1981).

Management Actions:

- All lands within the Timbered Crater WSA would be designated as wilderness to preserve their wilderness values.
- One noncompetitive oil and gas lease issued prior to December 31, 1982, would have valid existing rights. Exploration and drilling permits could be issued and plans of operation approved consistent with wilderness protection stipulations.
- The six geothermal leases issued prior to December 31, 1982, would have valid existing rights. Exploration permits would be issued and plans of operations approved, consistent with wilderness protection stipulations.

how about wildlife values

- Prescribed burning would be allowed to maintain or enhance wilderness values; in the Baker cypress area, it would be restricted to protect or enhance the species.
- Wildlife habitat development would be allowed when compatible with maintaining wilderness values.
- The entire area would be closed to ORV use.



STUDY AREA BOUNDARY (Dashed line denotes road)

PUBLIC LAND

CHERRY STEM ROAD

1 0 1

SCALE OF MILES

TIMBERED CRATER WILDERNESS STUDY AREA

ALTERNATIVE 1 - ALL WILDERNESS

MAP 2-1

-- Protect the Baker Cypress/Lava Rock Natural Area, which is a special value.

-- The area would be managed for Class I visual resource management objectives (no evident changes permitted) (Appendix 2).

-- The western ponderosa pine ecosystem would be maintained.

-- The existing grazing lease would continue.

-- BLM would attempt to acquire 195 acres of private inholdings within the WSA through an exchange to improve the manageability of the wilderness resource.

ALTERNATIVE 2 - PARTIAL WILDERNESS

Lands totaling 14,920 acres would be designated as wilderness to provide legislative preservation of the wilderness characteristics. The remaining 3,770 acres would be managed to maintain existing resource uses (Map 2-2), including the Baker cypress area which would continue to be managed as a natural area.

The odd-shaped pieces on the east boundary would be eliminated because they are adjacent to cultivated fields and pastures and would be difficult to administer. The north boundary, which follows the fire control lines of the 1977 fire, eliminates the 195 acres of private land and the Baker cypress area. There may be a need for manipulative research and active management of the Baker cypress stand. Excluding the natural area from wilderness designation would allow silvicultural treatments and research projects for maintenance of the health and vigor of the stand. The western boundary follows an existing jeep route and eliminates a forest plantation, allowing forest development practices on the plantation. By eliminating and using readily recognizable boundaries, those lands that would provide the most manageable unit would be designated wilderness.

Management Actions:

-- Management actions on those lands designated as wilderness would be the same as Alternative 1.

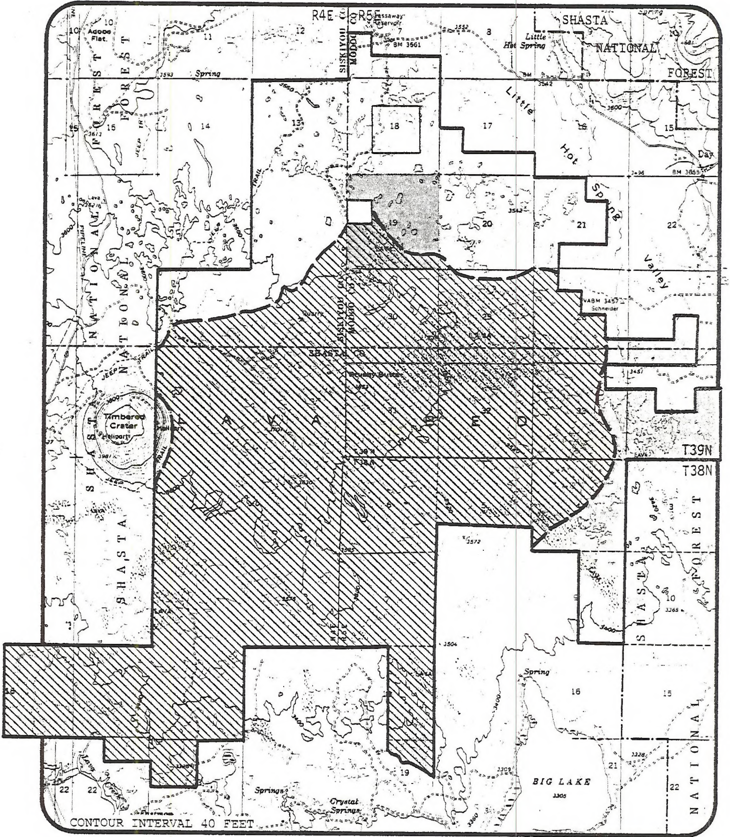
-- Management actions on the nonwilderness portion would be as follows:

1. Mineral development would be allowed except in the Baker Cypress/Lava Rock Natural Area, where it would be limited to actions not significantly affecting the Baker cypress stand.

what species

2. Prescribed burning would be allowed. Prescribed burning would be restricted in the Baker cypress area to protect or enhance the species.

3. Existing Recreation Opportunity Spectrum (ROS) classes would be maintained (Map 3-2).



┗┛ STUDY AREA BOUNDARY
(Dashed line denotes road)

☐ PUBLIC LAND

▨ PARTIAL WILDERNESS

TIMBERED CRATER WILDERNESS STUDY AREA

ALTERNATIVE 2 - PARTIAL WILDERNESS

MAP 2-2

4. ORV use would be limited to designated roads and trails.

ALTERNATIVE 3 - MULTIPLE USE/LIMITED DEVELOPMENT/NO ACTION (PROPOSED ACTION)

The present multiple use management of the area is oriented towards accommodating a limited amount of resource development consistent with the recently completed land use plan for the Redding Resource Area. Proposals for surface-disturbing actions are approved only with relatively stringent environmental protection stipulations. The most severe restrictions are imposed in the Baker cypress area, where no activities that would result in degradation of the natural/botanical values are permitted.

Management Actions:

-- Resource development would only be allowed where the predominantly natural appearing environment would be protected.

-- The Baker cypress area would continue to be managed as a designated natural area.

how?

-- Wildlife habitat in the critical deer winter range (1,000 acres) would be protected. Only developments compatible with habitat protection would be allowed.

-- 6,120 acres would be closed to ORV use, and 12,570 acres would be open to ORV use on designated roads and trails (presently the entire area is undesignated).

-- Prescribed burning would be allowed if protection of natural values is assured. Fire suppression and control methods would be limited to those causing minimum surface disturbance. No bulldozer use would be permitted without approval of the Area Manager.

-- Visual resources would be managed to meet Class II objectives (changes should not attract attention).

-- 480 acres in Sections 18 and 19, T. 38 N., R. 5 E. would be transferred to the State of California under the Recreation and Public Purposes Act.

ALTERNATIVE 4 - MULTIPLE USE/FULL DEVELOPMENT

Alternative 4 would allow for development of resources over most of the area, guided by standard management practices and by the environmental protection requirements of FLPMA, NEPA, and other regulations and policy. There would be no significant restraints for protection of the natural quality of the area, except for the Baker Cypress/Lava Rock Natural Area and the critical deer winter range, which would be managed to protect botanical values and wildlife habitat, respectively.

Management Actions:

-- Full development of resources would be allowed to occur on 16,500 acres.

-- The Baker cypress area would continue to be managed as a designated natural area.

-- Wildlife habitat in the critical deer winter range (1,000 acres) would be protected. Only developments compatible with habitat protection would be allowed.

-- ORV use would be allowed on existing roads and trails.

-- Visual resources in the Baker Cypress/Lava Rock Natural Area would be managed to meet Class II objectives (changes should not attract attention). Class IV objectives would be established for the remaining 17,542 acres.

-- 480 acres in Sections 18 and 19, T. 38 N., R. 5 E. would be transferred to the State of California under the Recreation and Public Purposes Act.

LAVA WILDERNESS STUDY AREA

ALTERNATIVE 1 - ALL WILDERNESS

All lands within the 11,632-acre Lava WSA would be designated as wilderness to provide legislative protection of the wilderness characteristics (Map 2-3). Discretionary management actions would be permitted only if consistent with preserving wilderness values.

Management Actions:

-- All lands within the Lava WSA would be designated as wilderness to preserve their wilderness values. The area would be managed in accordance with Wilderness Management Policy (USDI, BLM, 1981).

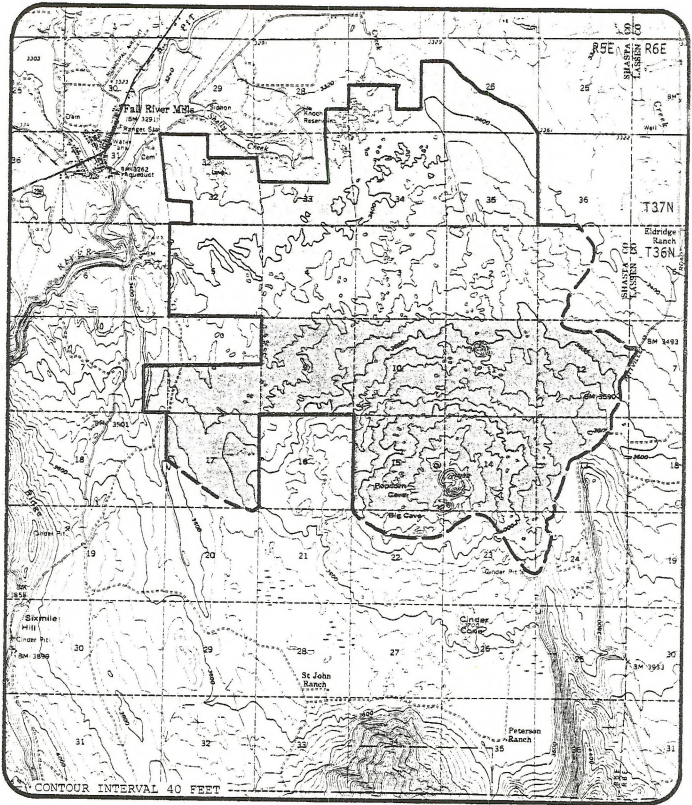
-- No mineral leasing and no mineral material sales would occur. The two oil and gas leases issued prior to December 31, 1982, would have valid existing rights. Exploration permits would be issued and plans of operations approved consistent with wilderness protection stipulations.

-- Prescribed burning would be allowed. Suppression and presuppression methods would be selected to maintain wilderness characteristics.

-- Wildlife habitat manipulation would be allowed if it does not impair wilderness values.

-- Visual resources would be managed to meet Class I objectives (no evident change permitted).

-- The area would be closed to ORV use.



☐ STUDY AREA BOUNDARY
(Dashed line denotes road)

▨ PUBLIC LAND

0
SCALE OF MILES

ALTERNATIVE 1 - ALL WILDERNESS

LAVA
WILDERNESS STUDY AREA

MAP 2-3

ALTERNATIVE 2 - MULTIPLE-USE/NO ACTION (PROPOSED ACTION)

Under Alternative 2, multiple-use management would be practiced on 11,632 acres. Management would remain as is currently practiced until a resource demand indicates a need for further development.

Management Actions:

-- Critical deer winter range would be managed to optimize habitat.

-- Existing grazing leases would continue.

-- Development of energy and nonenergy mineral resources and other resources would be allowed.

-- Recreation demands would guide management class designation except on critical deer winter range, where wildlife values would dominate.

-- Mineral material sales would occur upon demand.

-- ORV use would be limited to designated roads and trails.

COMPARATIVE ANALYSIS OF ALTERNATIVES

Tables 2-2 and 2-3 summarize the alternative actions. Tables 2-4 and 2-5 present a comparison summary of the impacts that would result from the implementation of the alternatives, including the proposed actions.

MANAGEMENT RECOMMENDATIONS

The management recommendation for the Timbered Crater WSA is Alternative 3, Multiple-Use/Limited Development, and for the Lava WSA is Alternative 2, Multiple-Use. Both Timbered Crater and Lava WSAs are recommended as nonsuitable for wilderness designation. Overall wilderness values are not high in either WSA, nor would the resources of the areas benefit significantly from the protection afforded by wilderness designation. All resources of special value will be adequately protected by existing programs and regulations.

In addition, there are numerous existing or candidate wilderness areas in the region that have higher quality wilderness resources. Therefore, designation of these WSAs would not contribute significantly to the availability of wilderness or the preservation of unique resources.

Table 2-2 Timbered Crater WSA

Summary of Alternatives

Resource	Alt. 1-All Wilderness	Alt. 2-Partial Wilderness	Alt. 3-Limited Development/No Action (Proposed Action)	Alt. 4-Multiple Use
Wilderness	All values preserved 18,690 acres.	Values preserved on 14,920 acres.	Preservation of wilderness values not guaranteed. Some wilderness values could be maintained.	No wilderness values guaranteed.
Minerals (a) Geothermal (b) Oil and Gas (c) Mineral Materials	(a) Six present leases allowed with non-impairing stipulations. (b) One present lease allowed with non-impairing stipulations. (c) No material sales.	Same as Alt. 1 in area designated for wilderness. Limited development allowed in officially designated Baker Cypress/Lava Rock Natural Area. Full development allowed in remaining nonwilderness area.	(a,b,c) Leasing allowed with minimal development. Regulated with stipulations to maintain natural state.	Leasing and full development allowed except in Baker cypress area which will be protected with stipulations.
Fire Management	Prescribed burning allowed when not impairing wilderness values. Suppression only when needed to protect lands and resources outside designated area. Suppression and pre-suppression methods selected to maintain wilderness values.	Same as Alt. 1 in area designated for wilderness. Burning for any purpose and suppression by any method in undesignated area. Prescribed burning in natural area restricted to protection of special values.	Prescribed burning only allowed to enhance resource values. Suppression allowed with methods causing minimum surface disturbance. Prescribed burning in natural area restricted to protection of special values.	Prescribed burning for any purpose allowed. No restriction on suppression except Baker cypress area to be protected. No restriction on presuppression tools or methods.
Wildlife	Habitat manipulation and development limited to those compatible with maintaining wilderness values.	Same as Alt. I in area designated for wilderness. No restrictions for rest of area.	Habitat manipulation and development limited to methods that maintain naturalness of the area. Structures and surface disturbance limited.	No restrictions on habitat manipulation or development except in Baker cypress.
Grazing	Continue existing grazing lease.	Same as Alternative 1.	Same as Alternative 1.	Could consider additional leases on suitable acreage.
Visual Resources	Manage in accordance with wilderness management guidelines. Class I objectives (no evident changes permitted) used to assess development activities and impacts on wilderness values.	Same as Alternative I for designated area. Maintain Class II on remaining area. (Changes do not attract attention).	Maintain Class II (changes do not attract attention).	Maintain VRM Class IV (changes may dominate).

Table 2-2 (Continued) Timbered Crater WSA

Resource	Alt. 1-All Wilderness	Alt. 2-Partial Wilderness	Alt. 3-Limited Development/No Action (Proposed Action)	Alt. 4-Multiple Use
Cultural Resources and Native American Religious Values	Full protection. Excavation, salvage, and restoration permitted only if they do not degrade wilderness values.	Same as Alternative 1 in area designated for wilderness. Subject to existing laws and regulations in remaining area.	Subject to existing laws and regulations.	Subject to existing laws and regulations.
Vegetation	Preserve in natural state.	Same as Alternative 1 including Baker cypress area. Allow modifications in nondesignated area.	Same as Alternative 2.	Preserve Baker cypress area in natural state. Modifications allowed in rest of area.
Lands and Realty Actions	Maintain in Federal ownership. Rights-of-way allowed if wilderness values not affected.	Same as Alternative 1 in area designated for wilderness. All actions allowed in areas designated for multiple use.	Any actions allowed would have stipulations for maintenance of predominately natural environment.	All actions allowed, except those occurring in Baker cypress area would be regulated to protect natural area.
Recreation	Manage for primitive recreation.	Same as Alternative 1 in area designated for wilderness. Maintain existing ROS classes in rest of area (Map 3-2). ORV use limited to designated roads and trails in nonwilderness area.	Maintain existing ROS classes (Map 3-2). ORV use limited to designated roads and trails in motorized area.	Maintain existing ROS classes in Baker cypress area and critical deer winter ranges. Respond to recreation demand on rest of area. ORV use permitted on existing roads and trails.

Table 2-3

Lava WSA

Summary of Alternatives

Resource	Alt. 1-All Wilderness	Alt. 2-Multiple-Use/No Action (Proposed Action)
Wilderness	All values preserved on 11,632 acres.	Maintain wilderness values dependent on resource demands and related actions.
Minerals	No mineral leasing allowed. Material sales of saleable minerals not allowed.	Full development of all minerals allowed within legal and environmental constraints.
Fire Management	Prescribed burning allowed if nonimpairing to wilderness characteristics. Suppression only when needed to protect lands and resources outside designated area. Suppression and presuppression methods selected to maintain wilderness values.	No restrictions on fire management activities.
Wildlife	Habitat manipulation activities limited to those not impairing wilderness values.	No restrictions on wildlife habitat management activities.
Recreation	Manage for primitive recreation. No ORV use.	No restrictions. Allow recreation demand to guide management class except on critical deer winter range, where present ROS classes would be maintained. ORV use limited to designated roads and trails.

Table 2-3 (Continued)

Lava WSA

Summary of Alternatives

Resource	Alt. 1-All Wilderness	Alt. 2-Multiple-Use/No Action (Proposed Action)
Livestock Grazing	Continue existing livestock grazing leases (3) on entire area.	Continue existing livestock grazing leases (3) on entire area.
Visual Resources	Manage according to wilderness management guidelines. Class I objectives (no evident changes permitted) used to assess activities and impacts on wilderness values.	No restrictions.
Cultural Resources and Native American Religious Values	Full protection. Excavation, salvage, and restoration permitted when they do not degrade wilderness values.	Subject to existing laws and regulations.
Lands-Realty Actions	Realty actions allowed when not affecting wilderness values.	No restrictions on realty actions.
Vegetation	Preserve in natural state.	No restrictions.
Land Tenure and Realty Actions	Retain in Federal ownership. Only realty actions allowed that would not degrade wilderness values.	No restrictions.

TABLE 2-4

TIMBERED CRATER SUMMARY OF IMPACTS

Resource	All Wilderness	Partial Wilderness	Limited Development	Full Development
Wilderness	Wilderness characteristics preserved on 18,690 acres.	14,920 acres would have wilderness characteristics preserved. 3,770 acres - no effect as management would not change from present.	Effects to wilderness characteristics minimized on 18,690 acres. Some degradation of wilderness values may occur.	Possible degradation of wilderness values.
Minerals	No mining claims have been filed; therefore, no significant impact. Potential for maximization of geothermal resources will be reduced. Geothermal development, using current technology, would probably not meet nonimpairment criteria, and would be denied. Oil and gas development could meet the nonimpairment criteria, so would be allowed. Geothermal and oil and gas potential is low. Significance highly dependent on the availability of new technology.	14,920 acres: No new mining claims allowed. No effect and no significance since no claims have been previously filed. Geothermal resource development slowed. Would limit future geothermal production. However, no significant effects since less than 10 percent of presently leased areas fall within designated area. 2,622 acres: mineral resources allowed full development. No significance since potential is low. 1,148 acres (natural area): mineral resource development potential limited. No significant effect since potential for development is low and there would be no change from present management.	Could increase cost of mineral development due to special stipulation. Not significant due to low development potential.	Low potential for increasing availability of energy resources and mineral materials. Consequences to other resources dependent on degree of development and would be analyzed on a case-by-case basis.
Fire Management	May result in higher cost and greater risks for fire management. which may jeopardize resource values (timber) outside designated area.	14,920 acres: may result in higher cost and greater risks for fire management. May jeopardize resource values outside designated area. 3,770 acres: no significant effect. No change from present.	May result in higher cost and greater risk for fire management.	No effect. No change from present.
Vegetation	Ensures long-term protection.	14,920 acres: ensures long-term protection. Significant amounts of vegetation disturbance not anticipated. No effect. No change from pre-WSA vegetation management activities. 1,148 (Baker cypress): no effect. 2,622 acres: no significant effect. No change from present.	Significant amounts of vegetation disturbances not anticipated. No significant effect. No change from present actions.	Vegetation outside of natural area subject to destruction or modification depending on resource development or habitat manipulation. No significance because of widespread occurrence and low potential for development.
Wildlife	No significant effect. No incompatible habitat manipulation planned.	14,920 acres: no significant effect. Habitat manipulation projects are not anticipated to degrade wilderness values. 3,770 acres: no effect. No change from present.	No effect. No change from present.	Wildlife habitat could be improved by manipulation. Wildlife disturbance by resource development probably insignificant because of low potential for development and limited ORV use.

TABLE 2-4 (continued)

Resource	All Wilderness	Partial Wildarness	Limited Development	Full Development
Recreation	Relatively low recreation values and demand; therefore, little effect with low significance.	14,920 acres: relatively low recreation values and demand; therefore, little effect with low significance. 3,770 acres: ORV designation changed from open to limited. No significant effect due to limited use.	No effect. No change from present ROS classes. ORV designation would reduce ORV use on 6,120 acres. Effects not significant since present use is low and confined to existing roads and trails.	None. Little recreation demand anticipated. ORV use is limited by terrain and topography.
Livestock Grazing	No significant effect. No change from present.	No significant effect. No change in existing use.	No effect. No change from present.	Range program could be expanded, but demand is low.
Visual Resources	Insignificant effect. No anticipated change of visual resource values.	14,920 acres: low scenic values. Insignificant effect. 3,770 acres: no changes from present.	No effect. No change from present.	No affect. Some visual change expected. However, most changes would be acceptable under the existing management Class IV.
Cultural Resources and Native American Religious Values	Wilderness values maintained where excavation would otherwise be used as a cultural mitigation. May restrict scientific study.	14,920 acres: may restrict scientific study. Significance unknown. Wilderness values preserved. 3,770 acres: no effect, no change from present.	Unknown cultural resources could be destroyed or damaged. Significance unknown.	Unknown cultural resources could be destroyed or damaged. Significance unknown.
Land Tenure	Preservation of wilderness values would be ensured on all lands within WSA. Acquisition of 195 acres would improve manageability.	14,920 acres: guarantees retention of designated lands in Federal ownership. 3,770 acres: no effect, no change from present.	Transfer of 480 acres to the State would not adversely effect resource development, as current use is recreational in nature.	Transfer of 480 acres to the State would not adversely effect resource development, as current use is recreational in nature.
Timber Management	No effect. Not presently managed as part of the available timber production base.	No effect. Not presently in productive timber base.	Not presently in productive timber base.	Insignificant potential for timber management. Currently not in timber production base, but could be added.
Socioeconomics	Socioeconomic impacts of wilderness designation for Timbered Crater would be insignificant. There is very little potential for development of minerals or other resources. The grazing lessee is not dependent on the WSA for his livelihood, and grazing would continue under wilderness designation. Visitor use of the WSA would increase by an unknown amount because of wilderness designation, and this would bring some tourist business to the area. This impact would be insignificant when compared to the overall tourist business within northeastern California.		No effect at the local, county, or regional level because of low level of resource potential and expected use.	

TABLE 2-5

LAVA WSA SUMMARY OF IMPACTS

Resource	All Wilderness	Multiple-Use/No Action
Wilderness	Wilderness values preserved on 11,632 acres.	Possible degradation of wilderness values. Not significant since similar wilderness attributes are adequately represented in other areas preserving same unique features, i.e., wilderness areas, national park, National monuments (refer to Chapter 3 - Diversity).
Minerals	No known geothermal or oil and gas resources. No mining claims. No effects. Potential loss of lightweight cinder materials; impacts not significant due to ample supply in area.	Continued availability of leaseable materials. Consequences to other resources dependent on degree of development and would be analyzed in site specific environmental reports. No significant effects since potential is low and there would be no change from present management practices.
Fire Management	Increased suppression costs. Potential fire hazard to Fall River Mills community and neighboring housing developments.	No effect. No change from present management.
Vegetation	Ecosystem already adequately represented and protected in immediate area. Significant amounts of vegetation disturbance not anticipated. No change from pre-WSA activities. No significant effects.	Vegetation manipulation projects anticipated to be small in scope and not expected to change present composition significantly. No significant effect. No change from present.
Wildlife	Guarantees long-term habitat protection for associated species. Not significant. Similar habitat readily available. Would limit habitat development opportunities in deer winter range (fences, water develops, etc.).	Potential for some increase in deer habitat quality, especially forage. Increased forage for livestock. Effects are expected to be minimal since no large projects are presently anticipated.
Recreation	No significant effect. Traditional recreational demand and use is light.	Little recreation demand anticipated. Terrain and topography limit ORV use. No significant effect. No change from present.
Livestock Grazing	No effect. No change from present.	No effect. No change from present management. Increased forage production capabilities limited due to terrain and soils.
Visual Resources	Visual quality and sensitivity not of great significance.	Some visual change expected; however, changes would be acceptable under the existing management Class IV.
Cultural Resources and Native American Religious Values	No effect. No indication of significant cultural resources known.	No effect since area has low level of sensitivity and use.
Land Tenure and Realty Actions	Would cause rerouting of potential extra high voltage (500 kV or greater) powerline corridor. Significance unknown.	No significant effect. Tenure adjustments and major rights-of-way not anticipated.
Socioeconomics	Same as for Timbered Cratered WSA	

Affected Environment

3

CHAPTER 3

AFFECTED ENVIRONMENT

TIMBERED CRATER WILDERNESS STUDY AREA

GENERAL DESCRIPTION

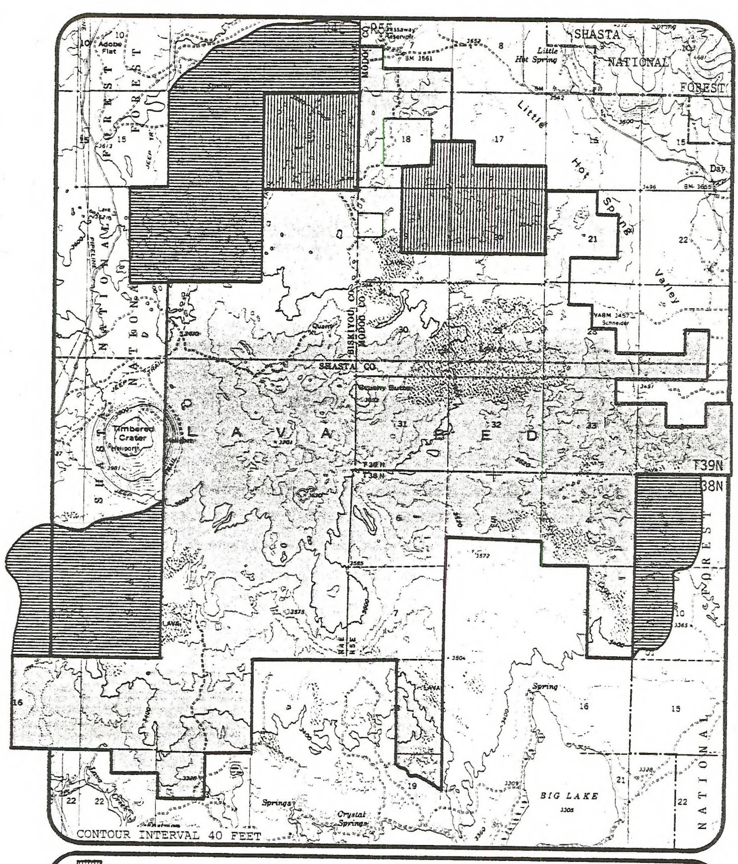
The Timbered Crater WSA is located in eastern Shasta County approximately 10 miles north of Fall River Mills. It is approximately six hours driving time from the Sacramento metropolitan area, four hours from Reno, and eight hours from the San Francisco area. The WSA is bounded on the northeast by private agricultural lands in the Little Hot Springs Valley. The southern boundary lies adjacent to the State of California's 5,890-acre Ahjumawi-Lava Springs State Park. The remaining portions are adjacent to portions of the Shasta National Forest administered by the Lassen National Forest. Three portions of the adjacent Forest Service lands were included in a large national package of lands "Administratively Endorsed for Wilderness" as part of the RARE II process (Map 3-1). However, as a result of a Secretary of Agriculture decision on February 1, 1983, these parcels will be considered as part of the Lassen National Forest Land Management Plan presently being developed.

Most of the WSA consists of public lands administered by the Bureau of Land Management. Two parcels, totalling 195 acres, are owned by Roseburg Lumber Company and are located in the north end of the unit. The total net area administered by the BLM is 18,690 acres.

The dominant feature in this area is the large crater on the west boundary. It lies mostly outside the unit with only the east edge on BLM lands. Its slopes are covered with grasses, manzanita brush, and ponderosa pine. The remainder of the unit consists of a large lava flow, which has not yet developed deep soils and is still rocky, rough, and difficult to traverse. The general topography of the lava flow is characterized by low buttes, shallow depressions, and drainages.

Natural vegetation on the lava flow consists of ponderosa pine, Digger pine, oak, juniper, and dense to scattered mountain shrub. Three Federally proposed threatened and endangered plants are found on the eastern perimeter of the WSA: Eryngium (Eryngium mathiasiae), Long-haired Star-tulip (Calochortus longebarbatus), and Slender Orcutt Grass (Orcuttia tenuis). This WSA is within the Sierra Forest Province-western ponderosa pine ecosystem (Bailey/Kuchler 1978).

A stand of Baker cypress is found within the northern portion of this unit, of which 1,148 acres were officially designated as a natural area in 1965. The natural area designation was established to protect the Baker cypress, a species with limited range and very specific site requirements. This area is an instant study area, and is being studied as a part of the Timbered Crater WSA (Map 3-1).



▥ BAKER CYPRESS/LAVA ROCK NATURAL AREA (ISA)

☐ PUBLIC LAND

▤ ADMINISTRATIVELY ENDORSED AREA--USFS

0

SCALE OF MILES

TIMBERED CRATER WILDERNESS STUDY AREA

USFS ENDORSED WILDERNESS AREAS
AND BLM BAKER CYPRESS NATURAL AREA
MAP 3-1

GEOLOGY-ENERGY-MINERALS

The U.S. Bureau of Mines and U.S. Geological Survey prepared a Mineral Land Assessment Report for the WSA (Peterson and Martin 1981). The report concludes that the area has little mineral potential except for flat-lavas used in building construction. The geothermal potential of the area cannot be precisely determined except by further geologic and geophysical study. However, it is considered to be low.

Recent interest in geothermal exploration has developed in the vicinity of the Timbered Crater WSA. The Lassen National Forest has completed an environmental assessment of the impacts of geothermal exploration in the Timbered Crater WSA and adjacent Forest Service lands. Six geothermal lease applications are on file involving lands within the WSA (11,883 acres). Special nonimpairment stipulations are identified in the environmental assessment for use if any development of geothermal resources occurs. No development has occurred to date.

No mining claims have been filed on lands within the WSA. Several permits for removal of ornamental flat rock were issued prior to 1970. Since this kind of material is readily available on private lands, and the material available on public lands is limited and of low economic value, sale of this material from public lands was discontinued. One noncompetitive oil and gas lease (3,200 acres) lies within the study area.

GRAZING

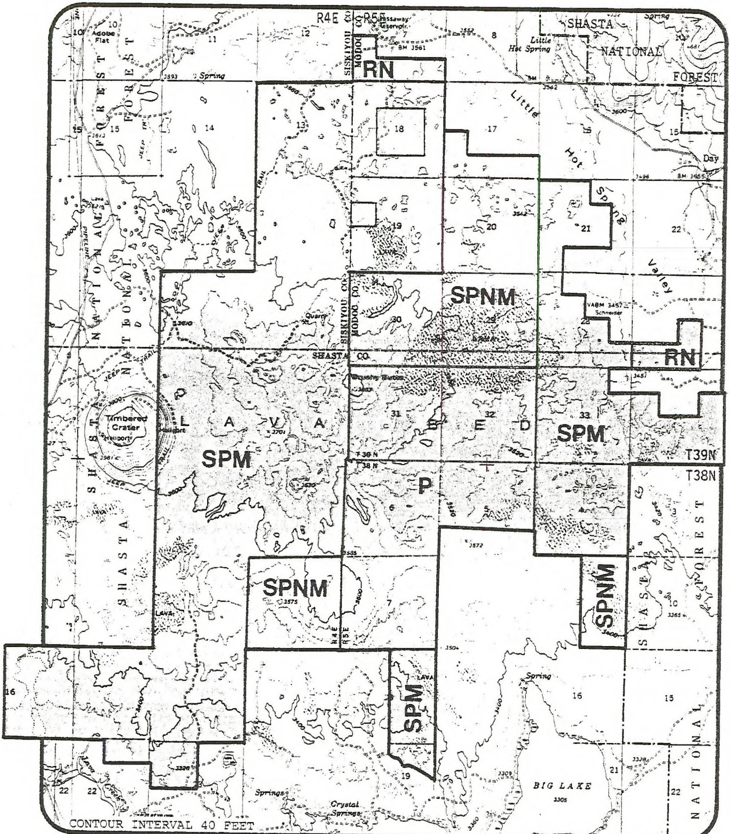
One cattle grazing lease is within the WSA. The lease totals 1,126 acres and supports 125 animal unit months (AUMs). Management is at a relatively low level with few improvements and no increases in capacity planned.

RECREATION

Previous field work and studies have proposed a trail system to provide access and feature the natural attractions within the area. The adjacent lands to the south of the unit were purchased by the State of California for the purpose of recreational development around Big Lake (Ahjumawi-Lava Springs State Park). Most recreation consists of off-road vehicle use and exploration of caves and lava tubes. Estimates of visitor use total 12,500 visitor days annually. Existing recreation opportunity spectrum (ROS) classes are as follows: Primitive 3,040 acres, semi-primitive nonmotorized 3,080 acres, semi-primitive motorized 12,210 acres, and roaded natural 360 acres (Map 3-2).

CULTURAL RESOURCES

There are five recorded and one unrecorded archaeological sites within the WSA. Friedman (1977) undertook an intuitive survey of approximately 15-20 percent of the area.



STUDY AREA BOUNDARY
(Dashed line denotes road)

PUBLIC LAND

P = Primitive SPNM = Semi-Primitive, Nonmotorized
RN= Roaded Natural SPM = Semi-Primitive, Motorized

0
SCALE OF MILES

RECREATION OPPORTUNITY SPECTRUM CLASSES

TIMBERED CRATER WILDERNESS STUDY AREA

MAP 3-2

One site (SHA-561) was recorded on the east leg of the Green Place Reservoir, a seasonal lake during aboriginal occupation (Derby, personal communication 1976). The site is a surface lithic scatter of moderate density, including two desert side-notched projectile points.

The second site is a rock cairn built at the edge of a lava tube (SHA-562). It does not appear to be ancient, and may have been built recently as a comfortable lunch seat. However, it could be a marker for the nearby underground cave.

MOD-264 is a sinkhole 15-20 meters in diameter with water and nearby scattered obsidian chippage.

By far the largest and most significant site is MOD-265 which contains 43 stone house rings and crevice burials. These rings range in diameter from 2.5 to 7.5 meters and are up to 65 centimeters high. Various chipped and ground stone artifacts are present. This is believed to be the site where soldiers surprised and killed a number of Indians in 1857, according to Measham's 1957 History of Fall River Mills and General Crook's memoirs.

MOD-266 is a large stone ring 7.7 meters in diameter with scattered chippage and points. The site record indicates a local rancher reported this to be an "Indian meeting ground."

An unrecorded feature of interest in the eastern region of Timbered Crater is what has been referred to as a "Squaw Trail" (Derby, personal communication 1976). Located in a rocky, very rough concentration of basalt, the trail consists of upright sticks about three feet high, secured by rock cairns at intervals of 15 feet or more. In some areas the rock pavement seems to have been polished smooth, possibly the result of long use of the marked trail. Although the trail was not followed to its total extent, approximately 30 rock cairns and markers were counted. The path seems to follow the easiest route through the rough terrain, and may well have been used by the aboriginal residents who traveled across this area. It originally was suggested that the trail was the end product of a Boy Scout map exercise or a recent prank. The cairns, however, appear to be too securely made and too extensive to have been casually built.

The paucity of archaeological resources reinforces the intuitive observation that Timbered Crater would have been an uninviting spot for habitation by aboriginal residents. The continuous jumble of angular rocks makes travel within the area very difficult. The scarcity of vegetation and, therefore, of faunal species, would mitigate against use by hunting and gathering peoples. The presence of "Squaw Trail" suggests that it often may have been necessary to traverse the area: nothing, however, is present to suggest that Timbered Crater was used extensively. It would appear that MOD-265, the "Squaw Trail" and possibly MOD-266 are eligible for inclusion in the National Register of Historic Places because of their complexity, uniqueness, research value and heritage interest. The other sites lack complexity or are common in the greater region.

WILDLIFE

any other wildlife

The entire unit is classified as general deer winter range, and about 1,000 acres along the eastern edge are classified as crucial deer winter range. Little hunting occurs within the area due to the late seasonal migration of the herd.

VISUAL RESOURCES

The WSA is considered to possess average scenic quality for the region. As a whole, it does not contain any exceptionally attractive landform or vegetation characteristics. In addition, the sensitivity to visual change of the public that views the area is rated to be relatively low. Using these primary indicators, scenic quality and viewer sensitivity, the area would rate a VRM Class IV classification, i.e., visual changes that are created by management actions may attract attention and be a dominant feature in the landscape, but should repeat the form, line, color, and texture of the landscape. (See Appendix 2 for details on the VRM system.)

LAVA WILDERNESS STUDY AREA

GENERAL DESCRIPTION

The Lava WSA is located about one-half mile southeast of the town of Fall River Mills in eastern Shasta County. It is approximately six hours driving time from the Sacramento metropolitan area, four hours from Reno, and eight hours from the San Francisco area. The WSA is bounded by private lands on the north; a road and private lands on the northeast, east, and southeast; and public lands and a gravel-surfaced county road on the south. The western portion borders private land.

This unit is comprised entirely of BLM-administered lands with no private inholdings. The total area is 11,632 acres.

The general topography of the WSA consists of an old lava flow dominated by a prominent butte. The butte is located on the southern end of the unit and rises 500 to 700 feet above the general elevation of the surrounding terrain. The ground surface is rocky and broken with buttes and broad depressions formed as a result of the cooling of lava flows.

Several lava tubes and caves are found near the south boundary and are part of an existing recreation site. Vegetation consists of sagebrush, manzanita, and oak brush with scattered juniper and Digger pine. This WSA is within the Sierra Forest Province--oak-juniper woodland ecosystem (Bailey/Kuchler 1978). One Federally proposed threatened and endangered plant hedge-hyssop (*Gratiola heterosepela*) is found on the southwest portion of the WSA.

GEOLOGY-ENERGY-MINERALS

A mineral resource report (Rogers 1982) has been completed for the WSA. The area has negligible mineral potential except for volcanic cinders and lava rock used in construction and for decorative purposes. The true geothermal potential of the area cannot be determined except by further geologic and geophysical study. The entire study area has been classified by the U.S. Minerals Management Service as "prospectively valuable for geothermal steam and associated geothermal resources." The geothermal resource potential is considered to be low. The Minerals Management Service has further determined that "the lands are without value for other leasable minerals."

No known mining activity has occurred within the subject area. The 1977 Bureau of Mines MILS data show no mines or prospects in the WSA. There are no mining claims located within this area according to California BLM records.

Two noncompetitive oil and gas leases (3,640 acres) have been issued in the northernmost and southernmost portions of the WSA.

Five cinder cones are present in the subject area--two in Section 11, two in Section 14, and one primarily in Section 15. The major uses for volcanic cinders are for road base construction and lightweight concrete aggregate. Minor uses include decorative landscaping and cindering of roads during the winter. Sources of cinders are abundant in this area, both on private and Federal lands. The lava rock in the WSA could theoretically be utilized for decorative or building purposes. There are, however, no indications that any of the stone in the WSA has been used for these purposes. Flat lava rock, which is considered especially valuable for building construction, does not occur in concentrated quantities in the study area.

GRAZING

The entire WSA is presently leased for cattle grazing by three separate livestock operators for a total of 427 animal unit months. Some fencing and livestock water developments are present within the WSA, but do not detract from natural characteristics of the area. No extensive development or increases in grazing capacity are planned.

RECREATION

Three primitive campgrounds within the WSA are no longer maintained due to lack of funding and low level of use. The sites are still being used by deer hunters. The area receives little use from ORV operators due to the rugged terrain. Several caves and lava tubes found within the area attract special interest recreationists, but traditional recreation use is light, occurring mostly in the form of hunting, camping, and hiking; annual use is estimated at 8,700 visitor days. Existing recreation opportunity spectrum (ROS) classes are as follows: semi-primitive non-motorized 6,002 acres, semi-primitive motorized 4,770 acres, and roaded natural 860 acres (Map 3-3).

CULTURAL RESOURCES

Only a very small portion (1-2 percent) of this area has been inventoried. No known sites are present. Landform, vegetation, and water resource availability suggest there are few cultural resources within the area.

WILDLIFE

The southern half of the WSA is classified as crucial deer winter range, while the rest of the area is general deer winter range. Some proposals have been made by the State Fish and Game Department to increase available forage for wildlife within the WSA. Portions of the area were withdrawn from certain disposal statutes in 1962 (27,492 acres) and are managed for use as a cooperative wildlife area with the California Department of Fish and Game. Management goals are to increase forage production for deer and livestock. Vegetation manipulation is the principal management tool to accomplish these goals. Quail habitat enhancement is a secondary goal. Past projects have included development of a guzzler for watering birds and small mammals, a 120-acre hand brush manipulation project to encourage brush sprouting for deer forage, and a 50-acre seeding to increase livestock forage.

VISUAL RESOURCES

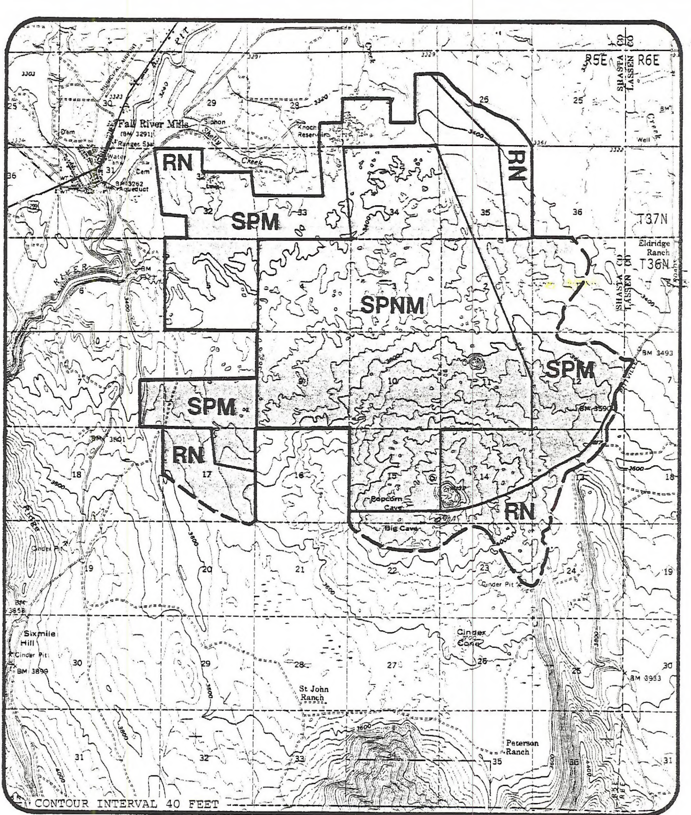
The WSA is considered to possess average scenic quality for the region. As a whole, it does not contain any exceptionally attractive landform or vegetation characteristics. In addition, the sensitivity to visual change of the public that views the area is rated to be relatively low. Using these primary indicators, scenic quality and viewer sensitivity, the area would rate a VRM Class IV classification, i.e., visual changes that are created by management actions may attract attention and be a dominant feature in the landscape, but should repeat the form, line, color, and texture of the landscape. (See Appendix 2 for details on the VRM system).

EVALUATION OF WILDERNESS VALUES AND MANAGEABILITY

TIMBERED CRATER WSA

MANDATORY WILDERNESS CHARACTERISTICS

Size - 18,690 acres.



STUDY AREA BOUNDARY
(Dashed line denotes road)

PUBLIC LAND

SPNM = Semi-Primitive, Nonmotorized
SPM = Semi-Primitive, Motorized
RN = Roaded Natural

RECREATION OPPORTUNITY SPECTRUM CLASSES

LAVA
WILDERNESS STUDY AREA

1 0 1
SCALE OF MILES

MAP 3-3

Naturalness

This area is essentially natural in character due primarily to its harsh, rocky, and difficult to traverse terrain. During the Dorr's Corner fire in 1977, several firebreaks were constructed across the lava flow. The resultant disturbance of the natural lava rock is apparent but was determined to be an impact that could be substantially unnoticeable with the passage of time. The native brush species are gradually growing back over the fire trails.

Some flat rock mining and evidence of past logging are within the WSA, and approximately five miles of cherry stem roads are along the perimeter of the Timbered Crater WSA.

Outstanding Opportunities for Solitude or Primitive Recreation

The size of the area, the broken topography, and the availability of vegetative screening create opportunities for solitude in the WSA. Primitive recreation opportunities are not outstanding; there are no unique or high quality recreation resources. Neither the solitude nor the recreation available are exceptional in northern California where numerous such opportunities exist.

SPECIAL FEATURES

The Timbered Crater Wilderness Study Area provides opportunities for botanical, geological, and limited archaeological studies. The unit consists of a large lava flow, which has not yet developed deep soils. A stand of Baker cypress (1,148 acres) is found within the unit. Cupressus bakeri is restricted to a small number of groves spread along the Cascade-Sierra mountains of northern California and extending into southern Oregon. The Timbered Crater WSA has part of the largest contiguous stand of Baker cypress (7,000 acres) and is the most accessible for study. While Baker cypress is a unique feature, the techniques for maintenance or enhancement of the species may be incompatible with wilderness designation.

DIVERSITY

Natural Systems

This WSA is within the Sierra Forest Province--western ponderosa pine ecosystem (Bailey/Kuchler 1978). Lava land forms are a predominant feature in the northern California, southern Oregon, and Idaho regions.

Opportunities Near Population Centers

The Timbered Crater WSA is within one day's driving time of two standard metropolitan statistical areas (SMSAs)--Sacramento, California, and Reno, Nevada. Both of these population centers have within a day's drive a large number of existing and proposed wilderness areas. Within 250 miles of Sacramento are 21 existing wilderness areas, 61 administratively endorsed candidate areas, and 216 study areas. Reno has 21 existing areas, 52 administratively endorsed areas, and 339 study areas within 250 miles.

Geographic Distribution

This WSA would not contribute significantly to a balanced geographic distribution of wilderness areas. The parks and forests of northern California have a large number of existing and proposed wilderness areas.

MANAGEABILITY

The Timbered Crater WSA would be manageable as wilderness. There are 195 acres of private lands within the WSA owned by Roseburg Lumber Company and managed for timber production. Approximately two miles of road provides access to the private parcels. Timber management practices on these parcels could detract from the area's wilderness characteristics in the vicinity but would not impair overall manageability.

There are six geothermal leases (11,883 acres) and one oil and gas lease (3,200 acres) with the WSA. However, geothermal and oil and gas potential and development are low. Some irregularly shaped parcels on the east and south boundaries could present some boundary management problems.

LAVA WSA

MANDATORY WILDERNESS CHARACTERISTICS

Size - 11,632 acres.

Naturalness

The WSA is essentially natural in character. Several vehicle routes have been established by occasional vehicle use, two wildlife guzzlers are present, and there is a limited amount of livestock fencing that can be found. None of these constitute significant intrusion on the naturalness of the area.

Outstanding Opportunities for Solitude or Primitive Recreation

The WSA generally offers opportunities for solitude, although this is affected to a minor degree in the northwestern part by the proximity of the sights and sounds of Fall River Mills. The topography is broken enough and there is adequate vegetative screening to offer the visitor chances to avoid other people.

Hunting quality for deer and upland game is relatively high, and opportunities for hiking and primitive camping exist. The relatively low level of current use indicates that the recreation values are not exceptional.

SPECIAL FEATURES

The Lava WSA provides an opportunity to study geologic features. The ground surface is rocky and broken with buttes and broad depressions formed as a result of the cooling of lava flows. Several lava tubes and caves are found near the south boundary.

DIVERSITY

Natural Systems

(See Timbered Crater, page 3-10).

Opportunities Near Population Centers

(See Timbered Crater, page 3-10).

Geographic Distribution

(See Timbered Crater, page 3-11).

MANAGEABILITY

Lava would be manageable as a wilderness, although some management problems do exist. The proximity of Fall River Mills and of privately owned land along the west boundary that is rapidly developing into residences could result in noise, woodcutting, litter, fire hazard, and other problems associated with concentrations of people.

Also, there are two oil and gas leases (3,640 acres) within the study area, but the probability of development is minimal, and manageability would not be significantly affected by development that meets the nonimpairment criteria.

COMPATIBILITY WITH OTHER LAND-USE PLANS

LASSEN NATIONAL FOREST

Lassen National Forest is currently developing new land management plans, which will determine management direction for the adjacent USFS lands. Three parcels (Map 3-1) that were previously administratively endorsed as wilderness are being reconsidered as part of the new land management plan. Prior to the RARE II process, the lands were designated for multiple-use with emphasis toward maintaining aesthetic values of geologic features and soil and vegetation resources. Some emphasis was placed on special management in the Baker cypress vegetation types.

STATE OF CALIFORNIA

The State of California has recently acquired 5,890 acres directly south of the Timbered Crater WSA. The area is classified and managed as a state park (Ahjumawi-Lava Springs State Park). A general management plan has not been developed.

Lava WSA is part of the Cinder Cone National Cooperative Land and Wildlife Management Area (NCLWMA), an area managed in cooperation with the California Department of Fish and Game (CDF&G) for the benefit of the wildlife resources. Both agencies have been involved in habitat improvement projects, especially water developments, which have significantly improved the habitat for upland game species. CDF&G has expressed concern over any changes that might affect their investment and management of these areas. Wilderness designation would constrain management options and, thereby, potentially conflict with the purpose of the Management Area. The present designation is, therefore, considered preferable to a wilderness designation relative to wildlife habitat management.

OTHER

The remaining adjacent lands are in Modoc and Shasta counties. The adjacent lands in Modoc County are designated by the county land-use plan for "range/livestock" grazing. Shasta County lands are designated for agriculture and open space. Shasta County is presently revising its land-use plans.

Environmental Consequences

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CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

Recommending a wilderness study area (WSA), or a portion thereof, as suitable for wilderness means that significant values exist that can be best protected, utilized, and managed under wilderness policy constraints.

Any area designated by Congress as wilderness will be managed within a discrete range of actions. These actions are described in the Bureau's Wilderness Management Policy (1981) and are the basis for analyzing or comparing the consequences of wilderness designation to other alternatives.

The impact analysis will concentrate on those resources described in Chapter 3 which will be subject to the most significant impacts. Resources which will not be affected will not be addressed in as much detail. In some cases limitations on impact analysis occurred due to a lack of data; in such instances, knowledge of the area and professional judgement were used to identify potential impacts.

Table 4-1

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 1 - All Wilderness

Resource	Management Action	Consequences
Wilderness	18,690 acres placed into the National Wilderness Preservation System.	Wilderness characteristics preserved on 18,690 acres.
Minerals	No new claims or leases after December 31, 1983, or after date of designation, whichever is later. Six geothermal and one oil and gas leased to date would be allowed to develop if they do not impair wilderness values.	No mining claims have been filed; therefore, no significant impact. Potential for maximization of geothermal resources will be reduced. Geothermal development, using current technology, would probably not meet nonimpairment criteria, and would be denied. Oil and gas development could meet the nonimpairment criteria, so would be allowed. Geothermal and oil and gas potential is low. Significance highly dependent on the availability of new technology.
Fire Management	Prescribed burning for protecttion of wilderness values. Suppression and pre-suppression in a manner that protects wilderness values.	May result in higher cost and greater risks for fire management. which may jeopardize resource values (timber) outside designated area.
Vegetation	Preservation of native vegetation in a natural state.	Ensures long-term protection.
Wildlife doesnt make sense	Permanent protection of natural habitat. Restrictions on habitat development to actions compatible with wilderness values.	No significant effect. No incompatible habitat manipulation planned.
Recreation	Management for primitive recreation. ORV use prohibited.	Relatively low recreation values and demand; therefore, little effect with low significance.
Livestock Grazing	Continue at present level. 1 lease, 1,126 acres, 125 AUMs. Range improvements limited to nonimpairing.	No significant effect. No change from present.

Table 4-1 (Continued)

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 1 - All Wilderness

Resource	Management Action	Consequences
Visual Resources	Visual resource values managed in accordance with wilderness management guidelines. Class I objectives (no evident changes permitted) used to assess development activities and impacts on wilderness values.	Insignificant effect. No anticipated change of visual resource values.
Cultural Resources and Native American Religious Values	Full protection of known and unknown sites. Excavation must meet nonimpairment guidelines.	Wilderness values maintained where excavation would otherwise be used as a cultural mitigation.
Land Tenure	Attempt to acquire 195 acres of private inholdings.	Would include all lands within WSA boundary under wilderness designations. Would ensure preservation of wilderness values and improve manageability of the area.
Timber Management	No timber management practices allowed.	No effect. Not presently managed as part of the available timber production base.
Socioeconomics	Socioeconomic impacts of wilderness designation for Timbered Crater would be insignificant. There is very little potential for development of minerals or other resources. The grazing lessee is not dependent on the WSA for his livelihood, and grazing would continue under wilderness designation. Visitor use of the WSA would increase by an unknown amount because of wilderness designation, and this would bring some tourist business to the area. This impact would be insignificant when compared to the overall tourist business within northeastern California.	

Table 4-2

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 2 - Partial Wilderness

Resource	Management Action	Consequences
Wilderness	14,920 acres placed into the National Wilderness Preservation System. 3,770 acres not designated.	14,920 acres would have wilderness characteristics preserved. 3,770 acres - no effect as management would not change from present.
Minerals	14,920 acres. No new claims or leases after December 31, 1983, or after date of designation, whichever is later. 3,770 acres: new claims permitted, special stipulations for protection of natural area included in leases and plans of development.	14,920 acres: No new mining claims allowed. No effect and no significance since no claims have been previously filed. Geothermal resource development slowed. Would limit future geothermal production. However, no significant effects since less than 10 percent of presently leased areas fall within designated area. 2,622 acres: mineral resources allowed full development. No significance since potential is low. 1,148 acres (natural area): mineral resource development potential limited. No significant effect since potential for development is low and there would be no change from present management.
Fire Management	14,920 acres: prescribed burning for protection of wilderness values. Suppression and pre-suppression in a manner to protect wilderness values. 3,770 acres: burning, suppression, and pre-suppression allowed on 3,770 acres, but only to enhance special values in natural area.	14,920 acres: may result in higher cost and greater risks for fire management. May jeopardize resource values outside designated area. 3,770 acres: no significant effect. No change from present.

Table 4-2 (Continued)

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 2 - Partial Wilderness

Resource	Management Action	Consequences
Vegetation	Preservation of natural vegetation composition in 15,130 acres. Protection of Baker cypress stand. No protection of natural vegetation composition on remaining area, except threatened and endangered plant species are protected by policy and law.	14,920 acres: ensures long-term protection. Significant amounts of vegetation disturbance not anticipated. No effect. No change from pre-WSA vegetation management activities. 1,148 (Baker cypress): no effect. 2,622 acres: no significant effect. No change from present.
Wildlife	14,920 acres: permanent protection of natural habitat restrictions. Restrictions on habitat development to actions compatible with wilderness values. 3,770 acres: management emphasis on deer winter range habitat enhancement.	14,920 acres: no significant effect. Habitat manipulation projects are not anticipated to degrade wilderness values. 3,770 acres: no effect. No change from present.
Recreation	14,920 acres: ORV use prohibited. 3,770 acres: manage for existing ROS classes. ORV use limited to designated roads and trails.	14,920 acres: relatively low recreation values and demand; therefore, little effect with low significance. 3,770 acres: ORV designation changed from open to limited. No significant effect due to limited use.
Livestock Grazing	Continue at present level. 1 lease, 1,126 acres, 125 AUMs. Range improvements limited to nonimpairing.	No significant effect. No change in existing use.
Visual Resources	14,920 acres: visual resource values managed in accordance with wilderness management guidelines. Class I objectives (no evident changes permitted) used to assess development activities and impacts on wilderness values. 3,770 acres: manage for Class II.	14,920 acres: low scenic values. Insignificant effect. 3,770 acres: no changes from present.

Table 4-2 (Continued)

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 2 - Partial Wilderness

Resource	Management Action	Consequences
Cultural Resources and Native American Religious Values	14,920 acres: full protection of known and unknown sites. Excavation must meet non-impairment criteria. 3,770 acres: management guided by existing law and regulations.	14,920 acres: may restrict scientific study. Significance unknown. Wilderness values preserved. 3,770 acres: no effect, no change from present.
Land Tenure	14,920 acres: no acquisition needed. 3,770 acres: retention in Federal ownership.	14,920 acres: guarantees retention of designated lands in Federal ownership. 3,770 acres: no effect, no change from present.
Timber Management	14,920 acres: no timber management practices allowed.	No effect. Not presently in productive timber base.
Socioeconomics	Same as Alternative 1. No effect to local, county, or regional social or economic factors due to past and predicted low use levels.	

Table 4-3

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 3 - Limited Development/No Action (Proposed Action)

Resource	Management Action	Consequences
Wilderness	No legislative protection. Naturalness of area maintained through administrative procedures.	Effects to wilderness characteristics minimized on 18,690 acres. Some degradation of wilderness values may occur.
Minerals	New leases and claims permitted. Special stipulations for protection of natural values included in leases and plans of development.	Could increase cost of mineral development due to special stipulation. Not significant due to low development potential.
Fire Management	Prescribed burning for protection of natural values only. No new fuel breaks. Suppression and pre-suppression tools and methods selected to cause minimum degradation of natural values.	May result in higher cost and greater risk for fire management.
Vegetation	Preservation of vegetation composition in a near natural state; threatened and endangered species protected by policy and law.	Significant amounts of vegetation disturbances not anticipated. No significant effect. No change from present actions.
Wildlife	Natural habitat protected. Manage for existing big game populations. Habitat development restricted to actions compatible with natural values.	No effect. No change from present.
Recreation	Maintain existing ROS classes. Limit ORV use to designated roads and trails.	No effect. No change from present ROS classes. ORV designation would reduce ORV use. Effects not significant since present use is low and confined to existing roads and trails.
Livestock Grazing	Continue at present level (125 AUMs, 1 lease).	No effect. No change from present.

Table 4-3 (Continued)

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 3 - Limited Development/No Action (Proposed Action)

Resource	Management Action	Consequences
Visual Resources	Manage for a Class II designation (changes do not attract attention).	No effect. No change from present.
Cultural Resources and Native American Religious Values	Existing laws, policy, and regulation would apply.	No effect. No change from present.
Land Tenure	Potential disposal (Recreation and Public Purposes Act) to the State of California of T. 38 N. R. 5 E., Section 18: East ½ and Section 19, NE¼ (approximately 480 acres).	Would be managed as State Park. No significant effect to resources since management would probably not change significantly.
Timber Management	No timber management practiced.	Not presently in productive timber base.
Socioeconomics	No effect at the local, county, or regional level due to low level of expected use.	

Table 4-4

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 4 - Multiple Use

Resource	Management Action	Consequences
Wilderness	No acres designated as wilderness.	Possible degradation of wilderness values.
Minerals	Current regulations apply. Geothermal development allowed to maximum potential. Leasable and locatable minerals allowed within constraints of current laws and regulations.	Low potential for increasing availability of energy resources and mineral materials. Consequences to other resources dependent on degree of development and would be analyzed on a case-by-case basis.
Fire Management	No special restrictions on fire management activities except in Baker cypress area, which would be protected unless fire enhances management of unique vegetation community.	No effect. No change from present.
Vegetation	Standard protection applies for threatened and endangered species. Baker Cypress/Lava Rock Natural Area designation retained.	Vegetation outside of natural area subject to destruction or modification depending on resource development or habitat manipulation. No significance because of widespread occurrence and low potential for development.
Wildlife	Manipulation of habitat under no special restrictions except in Baker cypress area. Standard protection practices apply for other resources.	Wildlife habitat could be improved by manipulation. Wildlife disturbance by resource development probably insignificant because of low potential for development and limited ORV use.
Recreation	Maintain existing ROS class in Baker cypress area. Respond to recreation demand. ORV use restricted to existing roads and trails.	None. Little recreation demand anticipated. Terrain and topography limited ORV use.

Table 4-4 (Continued)

ENVIRONMENTAL CONSEQUENCES

Timbered Crater WSA -- Alternative 4 - Multiple Use

Resource	Management Action	Consequences
Grazing	Expand present grazing program. No range improvement restrictions.	Range program could be expanded, but demand is low.
Visual Resources	Manage for inventoried management Class IV (actions can attract attention).	No effect. Some visual change expected. However, most changes would be acceptable under the existing management Class IV.
Cultural Resources and Native American Religious Values	Management subject to existing policy, regulation, and law.	Unknown cultural resources could be destroyed or damaged. Significance unknown.
Land Tenure	Tenure adjustements allowed following existing laws, regulations, and policy.	Would be managed as State Park. No significant effect since management would probably not change significantly.
	Potential disposal to the State of California of T. 38 N., R. 5 E., Section 18 (approximately 480 acres).	
Timber Management	Practice sustained yield timber production on plantations (70 acres).	Insignificant potential for timber management. Currently not in timber production base, but could be added.
Socioeconomics	No effect at the local, county, or regional level because of low level of resource potential and expected use.	

Table 4-5

ENVIRONMENTAL CONSEQUENCES

Lava WSA -- Alternative 1 - All Wilderness

Resource	Management Action	Consequences
Wilderness	11,632 areas placed in National Wilderness Preservation System.	Wilderness values preserved on 11,632 acres.
Minerals	No new claims after December 31, 1983, or after date of designation, whichever is later. Two oil leases authorized with non-impairing stipulations. No mineral material sales.	No known geothermal or oil and gas resources. No mining claims. No effects. Potential loss of lightweight cinder materials; impacts not significant due to ample supply in area.
Fire Management	Prescribed burning and suppression only when needed to protect lands and resources outside designated area. Suppression methods not to degrade wilderness.	Increased suppression costs. Potential fire hazard to Fall River Mills community and neighboring housing developments.
Vegetation	Preserve natural communities.	Ecosystem already adequately represented and protected in immediate area. Significant amounts of vegetation disturbance not anticipated. No change from pre-WSA activities. No significant effects.
Wildlife	Protection of natural habitat. Crucial deer winter range protected.	Guarantees long-term habitat protection for associated species. Not significant. Similar habitat readily available. Will limit habitat development opportunities in deer winter range.
Recreation	Manage for existing ROS classes. ORV use prohibited.	No significant effect. Traditional recreational demand and use is light.
Livestock Grazing	Existing leases and use levels continued (three leases 427 AUMs).	No effect. No change from present.
Visual Resources	Managed at the Class I level (no evident changes permitted).	Visual quality and sensitivity not of great significance.

Table 4-5 (Continued)

ENVIRONMENTAL CONSEQUENCES

Lava WSA -- Alternative 1 - All Wilderness

Resource	Management Action	Consequences
Cultural Resources and Native American Religious Values	Excavation, salvage, and restoration permitted if they do not degrade wilderness values.	No effect. No indication of significant cultural resources known.
Land Tenure and Realty Actions	Retain designated area in Federal ownership. Realty actions allowed if not degrading wilderness values.	Would cause rerouting of potential extra high voltage (500 kV or greater) powerline corridor. Significance unknown.
Socioeconomics	Socioeconomic impacts of wilderness designation of Lava would be insignificant. There is very little potential for development of any resource. The grazing lessees are not dependent on the WSA for their livelihood, and grazing would continue at present levels anyway. Visitor use of the WSA would increase by an unknown amount because of wilderness designation, and this would bring some tourist business to the area. This would be insignificant when compared to the overall tourist business in northeastern California.	

Table 4-6

ENVIRONMENTAL CONSEQUENCES

Lava WSA -- Alternative 2 - Multiple-Use/No Action (Proposed Action)

Resource	Management Action	Consequences
Wilderness	No acres placed into the National Wilderness Preservation System.	Possible degradation of wilderness values. Not significant since similar wilderness attributes are adequately represented in other areas preserving same unique features, i.e., wilderness areas, national park, National monuments (refer to Chapter 3 - Diversity).
Minerals	Current regulations apply. Oil, natural gas, and geothermal development allowed to maximum potential. Leaseable and locatable minerals allowed within constraints of current laws and regulations. Open to mineral entry.	Continued availability of leaseable materials. Consequences to other resources dependent on degree of development and would be analyzed in site specific environmental reports. No significant effects since potential is low and there would be no change from present management practices.
Fire Management	No special restrictions on fire management activities.	No effect. No change from present management.
Vegetation	Standard protection applies for threatened and endangered species.	Vegetation manipulation projects anticipated to be small in scope and not expected to change present composition significantly. No significant effect. No change from present.
Wildlife	Manipulation of habitat has no special restrictions.	Potential for some increase in deer habitat quality, especially forage. Increased forage for livestock. Effects are expected to be minimal since no large projects are presently anticipated.

Table 4-6 (Continued)

ENVIRONMENTAL CONSEQUENCES

Lava WSA -- Alternative 2 - Multiple-Use/No Action (Proposed Action)

Resource	Management Action	Consequences
Recreation	Allow all areas to be developed to a Rural Class if needed to enhance recreation uses when consistent with other resource management. Open for off-road vehicle use.	Little recreation demand anticipated. Terrain and topography limit ORV use. No significant effect. No change from present.
Grazing	Continue present grazing leases (427 AUMs). No range improvement restrictions other than legal constraints.	No effect. No change from present management. Increased forage production capabilities limited due to terrain and soils.
Visual Resources	Manage for inventoried management Class IV (actions can attract attention).	Some visual change expected; however, changes would be acceptable under the existing management Class IV.
Cultural Resources	Management subject to existing policy, regulation, and law.	No effect since area has low level of sensitivity and use.
Land Tenure	Tenure adjustments and rights-of-way allowed following existing laws, regulations, and policy.	No significant effect. Tenure adjustments and major rights-of-way not anticipated.
Socioeconomics	No effect at the local, county, or regional level because of low level of resource potential and expected use.	

UNAVOIDABLE ADVERSE IMPACTS

Wilderness designation legislatively assures that wilderness values will be protected. While this designation is the most effective means available for long-term protection of wilderness values, sensitive natural resource values would be protected in the multiple-use alternatives. Unavoidable adverse impacts are included in the environmental consequences tables.

RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Under the no wilderness alternatives, consumptive short-term uses would be afforded the opportunity for growth and would be encouraged where they would have the least potential for adverse impacts on multiple resource values.

The all wilderness alternatives would emphasize nonconsumptive long-term uses and the enjoyment of intangibles. These alternatives would enhance long-term productivity of wilderness values, but would adversely impact short-term productive use of other resource values.

The partial wilderness alternative for the Timbered Crater WSA provides for protection of wilderness and other resource values on over one-half the acreage in the wilderness study areas, while allowing for the same multiple-use activities of other resource values in the areas recommended as nonsuitable.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

All alternatives involve, to varying degrees, irreversible and irretrievable commitments of certain resources. The allocation of lands to consumptive uses, such as mining, motorized vehicle use, and utilities and energy development, could result in an irreversible and irretrievable loss of the wilderness resource over the long-term.

CUMULATIVE IMPACTS

The incremental impacts of adding both Timbered Crater and Lava WSAs to the National Wilderness Preservation System would be insignificant. There are few exploitable resources which exist within these areas, and those that do have prior existing rights. There would be several thousand more acres officially closed to ORVs because of wilderness designation, but present use is low and potential for significantly increasing use is slight because of the difficult terrain.

Also, not adding Timbered Crater and Lava WSAs to the National Wilderness Preservation System would not constitute a great loss of wilderness values on a regional or state-wide basis. Wilderness characteristics, as found within these two areas, are well represented in the wilderness system and over vast areas not within the system. Resource potential is low, so realistically, the wilderness values which do exist here will not change much regardless of designation.

The three surrounding Forest Service parcels administratively endorsed through the RARE II process will not become wilderness if Timbered Crater is found unsuitable, as they cannot stand alone. The resources and values of these parcels are similar to Timbered Crater WSA. Either inclusion or noninclusion of the Forest Service parcels in the wilderness system would not significantly affect the impact of the Bureau of Land Management's decision.

List of Preparers

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CHAPTER 5

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Distribution List

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CHAPTER 6

AGENCIES, ORGANIZATIONS, AND PERSONS RECEIVING COPIES OF THIS EIS

The following agencies, organizations, and individuals will receive a copy of this draft environmental impact statement:

FEDERAL REPRESENTATIVES AND AGENCIES

Advisory Council on Historic Preservation
Bureau of Reclamation, Sacramento
Congressman Gene Chappie
Congressman Norman Shumway
Environmental Protection Agency
Fish and Wildlife Service
U.S. Forest Service: Lassen, Shasta-Trinity National Forests
Senator Alan Cranston
Senator Pete Wilson
Soil Conservation Service

STATE REPRESENTATIVES AND AGENCIES

Assemblyman Stan Statham
Senator Ray Johnson
Senator James Nielsen
State Clearinghouse
California State University, Chico - Library
Native American Heritage Commission

LOCAL AGENCIES

Board of Supervisors and Dept. of Planning: Lassen, Modoc, Shasta, and Siskiyou counties
City of Fall River Mills
City of Burney

ORGANIZATIONS

Atlantic Richfield Company
California Association of Four Wheel Drive Clubs
California Cattlemans Association
California Native Plant Society
California Wilderness Coalition, Chico
Cooksley Geophysics, Inc.
Glass Mountain 4-Wheelers
Homestake Mining Co.
Fall River - Big Valley Cattlemans Association
National Resources Defense Council
Modoc County Cattlemans Association
Northern Counties Wildlife Association

ORGANIZATIONS (Continued)

Pacific Gas and Electric Company
Pacific Power and Light Company
Pit River Tribal Office
Roseburg Lumber Company
Sierra Club: Washington, D.C., Sacramento, Shingletown
Shasta Miners and Prospectors
Toyon Wintu Center Inc.
Western Mining Council

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Glossary

GLOSSARY

ANIMAL UNIT MONTH (AUM): The amount of forage required to sustain the equivalent of one cow or five sheep for one month.

CONTIGUOUS: Lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

FLPMA: The Federal Land Policy and Management Act of 1976 (Public Law 94-579, 90 Stat. 2743.43 USC 1701).

IMPACT: The effect, influence, alteration, or imprint of an activity.

IMPAIR: To diminish in value or excellence.

LIVESTOCK GRAZING OPERATIONS: Those operations under permit where the primary purpose is the grazing of livestock for the production of food and fiber. Includes pack and saddle stock used in conjunction with such operations.

MANAGEMENT FRAMEWORK PLAN (MFP): The Bureau's basic planning decision document prior to the adoption of a new planning process in 1979, in which the decision document is a Resource Management Plan (RMP).

MINERAL ENTRY: The right to enter the Public Lands (under the administration of the BLM) to search for minerals and to claim or lease such minerals under the mining and mineral leasing laws and regulations.

MOTORIZED EQUIPMENT: Any machine activated by nonliving power source except small battery-powered, handcarried devices such as flashlights, shavers, Geiger counters, and cameras. Also "Mechanized Equipment."

MOTOR VEHICLE: Any vehicle which is self-propelled or any vehicle which is propelled by electric power obtained from batteries.

MULTIPLE RESOURCE VALUES AND USES: The present and potential uses of the various resources administered through multiple use management on the public lands and any public values associated with such uses.

MULTIPLE USE: "...the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that take into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural, scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest economic return or the greatest unit output." (From section 103, FLPMA)

NATURALNESS: Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From section 2(c), Wilderness Act)

OFF-ROAD VEHICLE (ORV): Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other terrain.

OUTSTANDING: 1. Standing out among others of its kind; conspicuous; prominent. 2. Superior to others of its kind; distinguished; excellent.

PLANNING AREA: The area for which resource management plans are prepared and maintained. In most instances, it is the same as the resource area, which is a geographic portion of a BLM district, under supervision of an area manager.

PLANNING CRITERIA: The factors used to guide development of the resource management plan, or revision, to ensure that it is tailored to the issues previously identified and to ensure that unnecessary data collection and analyses are avoided. Planning criteria are developed to guide the collection and use of inventory data and information, the analysis of the management situation, the design and formulation of alternatives, the estimation of the effects of alternatives, the evaluation of alternatives, and the selection of the preferred alternative.

POPULATION CENTER: A Standard Metropolitan Statistical Area (SMSA) which has a population of 100,000 or greater. An SMSA is a county which contains at least one city of 50,000 inhabitants or more plus as many adjacent counties as are metropolitan in character and are socially integrated with that central city or cities.

PRE-FLPMA: Before October 21, 1976, the date of approval of the Federal Land Policy and Management Act.

PRELIMINARY WILDERNESS RECOMMENDATION: Refers to a wilderness recommendation at any stage prior to the time when the Secretary of the Interior reports his recommendation to the President. Until the Secretary acts, the recommendation is "preliminary" because it is subject to change during administrative review.

PRIMITIVE AND UNCONFINED RECREATION: Nonmotorized and undeveloped types of outdoor recreational activities.

PUBLIC LANDS: For the purpose of the wilderness review program, any lands and interest in lands owned by the United States within the several States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except:

1. Lands where the United States owns the minerals but the surface is privately owned.
2. Lands being held for the benefit of Indians, Aleuts, and Eskimos.
3. Lands tentatively approved for State selection in Alaska.
4. Lands on the Outer Continental Shelf.
5. Oregon and California grant (O & C) lands that are managed for commercial timber production.

RANGELAND IMPROVEMENTS: Any structural or nonstructural improvements which directly affect or support the use of the forage resource by domestic livestock, such as fences, line cabins, water lines, and stock tanks.

RESOURCE MANAGEMENT PLAN (RMP): The basic decision document of BLM's resource management planning process, used to establish allocation and coordination among uses for the various resources within a Resource Area. An RMP is a "land-use plan" prescribed by Section 202 of the Federal Land Policy and Management Act. RMP regulations appear in 43 CFR 1601. (Refer to definition of Management Framework Plan.)

SMSA: Standard Metropolitan Statistical Area - See definition under "Population Center."

SOLITUDE: 1. The state of being alone or remote from habitations; isolation. 2. A lonely, unfrequented, or secluded place.

SUBSTANTIALLY UNNOTICEABLE: Refers to something that either is so insignificant as to be only a very minor feature of the overall area or is not distinctly recognizable by the average visitor as being man-made or man-caused because of age, weathering, or biological change. An example of the first would be a few minor dams or abandoned mine buildings that are widely scattered over a large area, so that they are an inconspicuous part of the scene. Serious intrusions of this kind, or many of them, may preclude inclusion of the land in a wilderness study area. An example of the second would be an old juniper control project that has grown up to a natural appearance, the old fallen trees largely decomposed.

SUITABILITY: As used in the Wilderness Act and in the Federal Land Policy and Management Act, refers to a recommendation by the Secretary of the Interior or the Secretary of Agriculture that certain Federal lands satisfy the definition of wilderness in the Wilderness Act and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

WILDERNESS: The definition contained in Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WILDERNESS AREA: An area formally designated by Act of Congress as part of the National Wilderness Preservation System.

WILDERNESS CHARACTERISTICS: The definition contained in Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WILDERNESS INVENTORY: An evaluation of the public lands in the form of a written description and map showing those lands that meet the wilderness criteria as established under Section 603(a) of FLPMA and Section 2(c) of the Wilderness Act, which will be referred to as Wilderness Study Areas (WSAs).

WILDERNESS MANAGEMENT: The management of human use and influence on lands which have been designated by an Act of Congress as wilderness areas.

WILDERNESS PROGRAM: Term used to describe all wilderness activities of the Bureau of Land Management including identification, management, and administrative functions.

WILDERNESS RECOMMENDATIONS: A recommendation by the Bureau of Land Management, the Secretary of the Interior, or the President, with respect to an area's suitability or nonsuitability for preservation as wilderness.

WILDERNESS REPORTING: The process of preparing the reports containing wilderness recommendations on wilderness study areas and transmitting those reports to the Secretary of the Interior, the President, and Congress.

WILDERNESS REVIEW: The term used to cover the entire wilderness inventory study and reporting phases of the wilderness program of the Bureau of Land Management.

WILDERNESS STUDY: The process that specifies how each wilderness study area must be studied through the BLM resource management planning system, analyzing all resources, values and uses within the WSA to determine whether the area will be recommended as suitable or nonsuitable for wilderness designation.

WILDERNESS STUDY AREA (WSA): A roadless area or island that has been inventoried and found to have wilderness characteristics as described in Section 603 of FLPMA and Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WILDLIFE IMPROVEMENTS: Any structural or nonstructural improvements which directly affect or support the use of water, food, or shelter by wildlife, such as guzzlers, water lines, or fences.

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Appendices

8320 - PLANNING FOR RECREATION RESOURCES

Description of Recreation Opportunity Spectrum Classes

The enclosed chart describes each of the six ROS classes in terms of: (1) experience opportunities; (2) setting opportunities, and (3) activity opportunities (see also Glossary of Terms). These descriptors provide a general overview of the opportunities included in each class. These overview statements do not describe each class in detail, but rather provide a point of departure from which the planner or manager can develop more precise prescriptions for each class based on specific situations encountered in field operations. The listing of activity opportunities is provided for illustrative purposes. It is not an all-inclusive list of activity opportunities on the public lands.

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Primitive	Opportunity for isolation from the sights and sounds of man, to feel a part of the natural environment, to have a high degree of challenge and risk, and to use outdoor skills.	Area is characterized by essentially unmodified natural environment of fairly large size. Concentration of users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only facilities essential for resource protection are used. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts between groups. Motorized use within the area is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (nonmotorized craft).
Semi-Primitive Nonmotorized.	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and the safety of users only. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (nonmotorized craft).

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS—*Continued*

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Semi-Primitive Motorized.	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Explicit opportunity to use motorized equipment while in the area.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and safety of users only. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is permitted.	Same as the above, plus the following: ORV Use (4-WD, Dune Buggy, Dirt Bike, Snowmobile), Power Boating.
Roaded Natural	About equal opportunities for affiliation with other user groups and for isolation from sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present.	Area is characterized by a generally natural environment with moderate evidence of the sights and sounds of man. Resource modification and utilization practices are evident, but harmonize with the natural environment. Concentration of users is low to moderate with facilities sometimes provided for group activity. On-site controls and restrictions offer a sense of security. Rustic facilities are provided for user convenience as well as for safety and resource protection. Conventional motorized use is provided for in construction standards and design of facilities.	All activities listed previously, plus the following: picnicking, rock collecting, wood gathering, auto touring, downhill skiing, snowplay, ice skating, water skiing and other water sports, hang gliding, interpretive use, rustic resorts and organized camps.
Rural	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities These factors are generally more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant, except in those activities involving challenge and risk.	Area is characterized by substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads and trails, are designed for moderate to high use. Moderate densities are provided far away from developed sites. Facilities for intensive motorized use are available.	All activities listed previously, plus the following: competitive games, spectator sports, bicycling, jogging, outdoor concerts, and modern resorts.

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS—*Continued*

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Modern Urban	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. Experiencing the natural environment, and the use of outdoor skills are largely unimportant.	Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soil may be protected by surfacing. Sights and sounds of man, on-site, predominate. Large numbers of users can be expected. Modern facilities are provided for the use and convenience of large numbers of people. Controls and restrictions are obvious and numerous. Facilities for high intensity motor use and parking are present with forms of mass transit often available.	All activities listed previously.

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APPENDIX 2

VISUAL RESOURCES MANAGEMENT CLASSES

1. Class I. This class provides primarily for natural ecological changes; however, it does not preclude very limited management activity. Any contrast created within the characteristic environment must not attract attention. It is applied to wilderness areas, some natural areas, wild portions of the wild and scenic rivers, and other similar situations where management activities are to be restricted.

2. Class II.* Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. A contrast may be seen but should not attract attention.

3. Class III.* Contrasts to the basic elements (form, line, color, texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape. However, the changes should remain subordinate to the existing characteristic landscape.

4. Class IV:* Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, the change should repeat the basic elements (form, line, color, texture) inherent in the characteristic landscape.

5. Class V. Change is needed or change may add acceptable visual variety to an area. This class applies to areas where the naturalistic character has been disturbed to a point where rehabilitation is needed to bring it back into character with the surrounding landscape. This class would apply to areas identified in the scenic evaluation where the quality class has been reduced because of unacceptable cultural modification. The constrast is inharmonious with the characteristic landscape. It may also be applied to areas that have the potential for enhancement, i.e., add acceptable visual variety to an area/site. It should be considered an interim or short-term classification until one of the other VRM class objectives can be reached through rehabilitation or enhancement. The desired visual resource management class should be identified.

*Structures located in the foreground distance zone (1/2 mile) often create a contrast that exceeds the VRM class, even when designed to harmonize and blend with the characteristic landscape. This may be especially true when a distinctive architectural motif or style is designed. Approval by the District Manager is required on a case-by-case basis to determine whether the structure(s) meet the acceptable VRM class standards and, if not, whether they add acceptable visual variety to the landscape.

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